

I claim:

1. A modular clockspring having a plurality of individually modifiable modules, comprising:

5 a housing module and a cover module which are generally circular shaped and matable to form an enclosure, a flat cable module placed inside the enclosure formed by the housing module and cover module, an ID connector module secured to an inner end of the flat cable module and an OD connector module secured to an outer end of the flat electrical cable.

10 2. The modular clockspring of claim 1, wherein the ID connector module protrudes through an opening in the cover module, and the ID connector module and the cover module are capable of rotating simultaneously relative to the housing module.

15 3. The modular clockspring of claim 1, wherein the housing module includes a slot having an outer slot section and an inner slot section, the outer slot section have a greater width than the inner slot section, and the cover module including a hub with flanges on an end thereof, the hub being adapted to be inserted into the outer slot section and then moved to the inner slot section, the
20 flanges engaging the edges of the inner slot section to mate the cover module to the housing module.

4. The modular clockspring of claim 3, wherein the housing module slot includes a groove along the sides of the slot, and wherein the OD connector
25 module includes a lip that is inserted into the groove to secure the OD connector module to the housing module.

5. The modular clockspring of claim 4, further comprising a locking module that mates with the housing module and the OD connector module to secure the OD connector module to the housing module.

5 6. The modular clockspring of claim 1, wherein the clockspring is used in a steering column of an automobile.

7. A modular clockspring for use in automobiles, the clockspring having modules, each module capable of being modified without affecting the other modules of the clockspring, the clockspring comprising:
10 a housing module and a cover module providing an enclosure and holding a flat cable module, an ID connector module secured to an inner end of the flat cable module and an OD connector module secured to an outer end of the flat cable module, the ID connector module being adapted to be connected to a
15 component in a steering column and the OD connector module being adapted to be connected to a component in another part of the vehicle.

8. The modular clockspring for use in an automobile of claim 7, wherein the ID connector module protrudes through an opening in the cover module, and the ID connector module and the cover module are capable of
20 rotating relative to the housing module.

9. The modular clockspring for use in an automobile of claim 7, wherein the cover module includes a hub and the flat cable module is placed
25 around the hub, the hub having flanges on an outer end thereof, the flanges engaging a slot in the housing module to secure the cover module to the housing module.

10. The modular clockspring for use in an automobile of claim 9, wherein the slot in the housing module has a groove along its sides, and the OD connector module includes a lip that engages the groove and abuts against the hub to secure the cover module to the housing module.

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11. The modular clockspring for use in an automobile of claim 7, further comprising a locking module that mates with the housing module and the OD connector module to secure the OD connector module to the housing module.